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ABSTRACT

American and European business taxation policies are compared in this booklet. Topics discussed in the paper include effects of the corporation income tax, integration of income taxation, and the value added tax. Two major differences between the American and European systems are noted. First, European countries derive substantial portions of their tax revenues from the tax on value added (TVA), a form of general sales tax, whereas the federal government of the United States levies no general sales tax. The second important difference is that most common market members allow relief from the double taxation of dividends, whereas the United States business tax system allows no such exemption. The author concludes that the present American system of taxing corporation source income has serious defects from both allocating and distributional points of view and that there should be at least partial integration of the corporation income tax and the personal income tax. Footnotes and references are included. (Author/DB)

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U.S. TAXATION OF BUSINESS:
RELEVANCE OF THE EUROPEAN EXPERIENCE

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Bloomington, Indiana: Institute of German Studies, 1976

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U. S. Taxation of Business: Relevance of the European Experience

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I. Introduction

Anyone comparing the tax systems of the national governments of the United States and various European countries would be struck by the marked difference in the taxation of business. European countries derive substantial portions of their tax revenues from the tax on value added (TVA), a form of general sales tax, whereas the federal government of the United States levies no general sales tax. The second important difference is that most common market members allow relief from the double taxation of dividends that result from the interplay of the corporation income tax and the personal income tax. On the other hand, the United States utilizes a so-called "classical" system in which there is no attempt at even partial integration of the two income taxes.

Over the years these two differences have received considerable attention in the United States and the last two presidents have each suggested that the United States might consider adopting European practices in these areas. That is, in 1971 President Nixon suggested that the United States might consider using a federal tax on value added to replace part of the revenue now derived from the property taxes levied at the local level to finance education. Similarly, in July 1975 the Ford administration proposed to the Congress that the United Sates should allow complete relief from the double taxation of dividends. Though

neither proposal found substantial support, it seems likely that advocacy of both the tax on value added and integration of the income taxes will continue. Therefore, it seems reasonable to examine the defects of the present system of taxing corporate source income, the advantage of adopting either partial or total integration of the corporate and personal income taxes, and the pros and cons of adopting a federal tax on value added or some other form of federal general sales tax. These questions are examined in the next three sections and section V considers using a general sales tax to make up the revenue lost in integration of the income taxes.

We conclude that the present system of taxing corporation-source income has serious defects from both allocative and distributional points of view. Integration, whether applied only to distributed corporate-source income or to all corporate-source income, would improve resource allocation, but at the expense of substantial revenue loss and reduction of over-all progressivity of the tax system. Therefore it is likely to be acceptable only if a way can be found to make up the lost revenue and offset the regressive distributional implications of integration. One possible way to make up the revenue loss is by imposing a tax on value added, which is a relatively neutral form of taxation. But a simple retail sales tax would probably be more sensible in the American context, given the prevalence of this form of general sales tax at the state and local level. Moreover, the regressivity of either of these forms of sales tax makes it even more imperative that integration be accompanied by substantial tax reform that would reduce the preferences currently available to high income taxpayers.

II. Effects of the Corporation Income Tax[1/]

Integration of the corporation income tax and the personal income tax has been proposed as a way to eliminate, or at least reduce, the economic distortions and inequities created by the present system of taxing income originating in the corporate sector. Moreover, even though President Nixon proposed linking the adoption of the federal tax on value added to the reduction in reliance on local property taxes, most of the prior discussion of the TVA in the United States had centered upon using it as a replacement for revenue that would be lost if the corporation income tax were reduced or eliminated. It would therefore seem convenient to begin by discussing the effects of the present classical system of taxing corporate income, before turning to the explicit discussion of integration and the value added tax.

Equity income originating in the corporate sector is taxed under two, and perhaps three, more or less distinct income tax regimes in a country employing a classical system. First the income is taxed at the corporate level - at the rate of 48 percent in the United States.[2/] Then dividends (in excess of the exclusion of $100 per taxpayer) are included in the taxable income of the shareholder and subjected to the marginal tax rates applicable to personal income. In the United States dividends are taxed as ordinary income, that is, at rates ranging from 0 to 70 percent. Finally, in some countries retained earnings are taxed to the shareholder to the extent that they give rise to capital gains. In the United States at most one half of gains on assets held for more than six months are included in taxable income and taxed at ordinary rates. But in present value terms effective tax rates are reduced even further because capital gains are taxed

only as they are realized, rather than as they accrue, and gains on assets transferred at death are not taxed at all. Thus the effective tax rate, in present value terms, on retained earnings resulting in long term capital gains can range from 0 to 35 percent, depending upon the shareholder's own marginal tax rate on ordinary income, the length of time he holds the asset after gains accrue, and whether or not the asset is transferred at death.[3/]

This three-pronged system of taxation gives rise to serious economic distortions and inequities.[4/] Perhaps most notable is the double taxation of dividends. Distributed corporate source income is taxed at rates that range from 48 percent to 84.4 percent in the United States, even though the statutory rates on ordinary income range from 0 to 70 percent. As a percent of statutory marginal rates, the overtaxation is greatest at the lower income levels. The double taxation of dividends is, of course, what the integration schemes currently used in European countries are intended to overcome.

Like dividends, retained earnings attributable to low income taxpayers and tax-exempt organizations are taxed at combined corporate and personal rates that can be far in excess of statutory marginal rates. On the other hand, retentions attributable to high income individuals can be taxed either more or less heavily than ordinary income. Undertaxation is, of course, particularly high on gains on assets transferred at death or realized long after they accrue. In the extreme case a taxpayer in the 70 percent marginal tax bracket would pay only the 48 percent corporate tax rate.

Theoretically income derived from corporate equities could be taxed either more or less heavily, on the average, than income from the non-corporate sector. As a matter of fact, ownership patterns, dividend payout rates, and marginal tax rates of individual shareholders are such that income originating in corporate equities is taxed more heavily than capital income in the non-corporate sector.

The tax differentials just described have several undesirable effects upon resource allocation and financial decisions. Perhaps most obviously, capital is made extraordinarily expensive in the corporate sector. As a result, the corporate sector is less capital intensive than under a neutral tax system and the non-corporate sector is more capital intensive. In addition, consumer choices are distorted away from the products of the corporate sector. This is, of course, particularly burdensome on capital intensive industries. It has been estimated that the welfare loss resulting from these distortions of resource allocation may be as much as .5 percent of GNP or, of perhaps greater relevance, 10 to 15 percent of the revenue gained from taxing corporate source income at rates greater than those applicable to non-corporate income.[5/]

In addition to these important distortions of resource allocation, there are important effects upon the financial decisions of corporations. Because equity income is taxed more heavily on the average than are interest payments, which are deductible to the corporation and taxed as ordinary income to bondholders, it is likely that corporate debt-equity ratios are higher than they would be under a neutral tax system. The welfare loss implied by tax-induced increases in leverage is difficult to measure, but it seems

likely that the increased vulnerability to bankruptcy in times of recession should not be taken lightly. Similarly, because of the more favorable treatment accorded retained earnings than distributed earnings, corporate managers are reluctant to raise equity capital from new issues rather than from retained earnings. As a result, firms with substantial flows of internal funds have lower costs of capital than do those which must rely upon new issues for equity capital, and much of the benefits of allocating capital through competitive capital markets may be lost.

Finally, it seems likely that the differential taxation of the two forms of return to equity capital has adverse distributional effects. The tax preferences accorded long term capital gains are quite attractive to high income individuals, but more or less irrelevant for low income individuals. In addition, high income individuals are more likely than low income individuals to have the latitude to arrange their investment portfolios to take advantage of the tax preferences for long term capital gains rather than relying upon dividend income.

The primary advantages of the corporation income tax are that it raises a substantial amount of revenue in a way that is fairly easy to administer, if quite complex, it prevents retained corporate source income from going largely untaxed, as it would if taxed only at the shareholder level, and it contributes importantly to the overall progressivity of the tax system because of the distribution of ownership of corporate shares among income classes. But the last two of these three effects are really true as stated only if, as implicitly assumed thus far, the corporation income tax is borne by shareholders, rather than being shifted in the short run to consumers or

workers or shared by owners of capital other than corporate equities. Given the potential importance of various types of shifting of the corporation income tax, it is worthwhile to digress briefly to consider the likelihood that for one reason or the other the incidence of corporation income tax is not what it appears at first glance to be.

Traditional economic theory has held that in the short run a tax on profits cannot be shifted, either to consumers or to labor or other factors of production. There are, however, a number of reasons why this result may not hold, or may not be relevant. Perhaps most obviously, the corporation income tax is levied upon the entire return to equity capital in the corporate sector, and not merely upon economic profits. Thus the tax cannot be expected to be absorbed by shareholders, except in the very short run. In the long run case, to be considered shortly, the distinction between economic profits and normal return to capital is even more crucial. In addition, the traditional view of no-shifting is based upon the assumption that the corporate sector is either purely competitive or perfectly monopolized. But much of American industry lies in the middle realm of oligopoly, where there are few firms, but not only one. If these firms act collusively, or even consciously parallel, it is quite likely that part of even a tax on profits would be shifted either to consumers or to workers unless joint profits of the industry had previously been maximized. Partial shifting to labor is especially possible if wage negotiations are based in part upon the after-tax earnings of corporations.

If, in fact, the corporation income tax is shifted forward to consumers or backwards to workers it does not have many of the advantages often

attributed to it. In particular, it does not prevent a tax haven in retained earnings, and, in fact, is likely to be regressive rather than progressive. Unfortunately, attempts to employ econometric methods to determine the short-run incidence of the corporation income tax have been discouraging unsuccessful. Studies done over the past 15 years have produced a variety of results ranging from zero shifting to more than 100 percent shifting in the short run. Even worse, it is not even possible to determine reliably which of these various studies of incidence are best. Finally, many knowlegeable observers believe that we are not likely to be able to determine empirically the short-run incidence of the corporation income tax.[6/]

While there is considerable controversy about the extent of the short-run shifting just discussed, there can be little doubt that another kind of shifting occurs if short run shifting does not. As noted above, the corporation income tax applies to the entire return to equity capital in the corporate sector, and not just to economic profits. As a result, if the tax is not shifted, equity investment in the corporate sector is made considerably less attractive than that in the non-corporate sector and in corporate bonds, and it is likely that capital would be reallocated from the more heavily taxed to the less heavily taxed investments. This reallocation of capital would cause the gross rate of return on corporate equity capital to rise and that on other investments to fall until the same net rate of return could be realized in either kind of investment.[7/] This process, which we can call Harberger-type shifting, results in the burden of the corporation income tax being borne not just by stockholders, but by all owners of capital.[8/]

Harberger-type shifting has important, but not generally recognized, implications for tax incidence and integration of the income taxes.[9/] First, the progressivity of the corporation income tax is reduced somewhat if the tax is borne by all owners of capital, rather than just corporate shareholders. Though high income individuals have a larger proportion of all capital income than of total income, the distribution of all capital income is somewhat less skewed than that of stock ownership. Second, to the extent that the corporation income tax is shared by owners of non-corporate capital, double taxation of dividends is reduced. But in economic terms this inequity extends to all forms of capital income if Harberger-type shifting occurs. Similarly, the over-taxation of retained corporate-source income attributable to low income groups is reduced by Harberger-type shifting. But we have seen that because of the preferential treatment of long term capital gains, retained corporate source income is presently undertaxed for many high income individuals when both the corporate and individual income taxes are considered. The reduction in taxation of this kind of income that results from Harberger-type shifting actually accentuates under-taxation at the top of the income scale, and in the extreme case can produce serious vertical inequities. Thus from a distributional point of view, Harberger-type shifting is a mixed blessing. And, of course, it occurs only because of the differentially higher and non-neutral taxation applied to the corporate sector. In summary, whether we assume that the corporation income tax is borne entirely by shareholders or, as is more likely, by all owners of capital, it has serious defects from both a distributional and allocative point of view.

III. Integration of Income Taxation[10/]

Recognizing the defects of the so-called classical system of corporation income tax just described, many European and other developed countries provide at least partial relief from the double taxation of dividends. Though the prestigious Carter Commission recommended in 1966 that Canada do so, virtually no country extends integration to retained corporate source income. It is nevertheless useful to review briefly one way total integration could be achieved.

The key to the Carter proposal is (a) to treat the corporation income taxes merely a withholding device and (b) to allocate to shareholders retained earnings, as well as dividends, both on a "grossed-up" basis. That is, dividends and retentions, including corporation income tax collected on the pre-tax profits giving rise to them, would be included in personal income for tax purposes. Credit would then be allowed for the same corporation taxes deemed to have been paid on behalf of the shareholders.[11/]

Complete integration has the basic advantage of avoiding the many defects inherent in the classical approach to taxing corporate-source income. As can be seen in Table C, corporate-source income bears the same tax burden as ordinary income. Thus the horizontal and vertical inequities and the misallocation of resources generated by the separate taxation of corporation income are avoided. Of course, to be acceptable on equity grounds, integration, which would benefit primarily upper income households, would probably need to be accompanied by the closing of tax loopholes of special benefit to high-income taxpayers.

Relief from double taxation of dividends is currently provided in essentially two ways. West Germany employs what is perhaps the most

obvious approach, the split-rate system. Under it a rate of 51 percent is applied to corporation earnings that give rise to retentions while dividends are taxed at a rate of only 15 percent.[12/] Thus approximately half the excess taxation of dividends is eliminated in Germany. An approach which is equivalent to the split-rate system, but perhaps easier to understand, is the allowance of deduction for some fraction of dividends paid.[13/] In the extreme case, dividends would be totally deductible to the corporation and would therefore be taxed only at the marginal tax rate applicable to the individual shareholder's personal income. This would be equivalent to a split-rate system with a tax rate of zero on income from which dividends are paid. If deduction were allowed for only two-thirds of dividends paid, relief would be provided for about half of double taxation of dividends.

The other approach to integration for dividends only is practiced in such countries as Great Britain, Canada, and France, and goes under such varied names as the imputation method, the withholding method, and the gross-up and credit. Under it, the corporation income tax continues to be levied as under the classical system, but becomes only a withholding device insofar as distributed earnings are concerned. That is, the shareholder includes dividends in his taxable income and is allowed credit for taxes paid at the corporate level on the gross income giving rise to the dividends. But in calculating the amount of dividends to include in his taxable income he "grosses up" the net dividend actually received by the amount of the applicable credit in order to determine the amount of income that the corporation had to earn in order to pay the net dividend. Thus this approach is similar to the Carter approach to full

integration, but applies only to dividends.

Though the imputation method and the split-rate or dividend-paid deduction approaches appear to be quite different, in fact they are economically equivalent from a theoretical point of view. That is, either can be used to provide an amount of relief from double taxation of dividends ranging from zero to 100 percent. But they have one important practical difference. Under the dividend paid deduction approach the relief from double taxation of dividends extends automatically to all shareholders. On the other hand, relief under the imputation method, being applied at the shareholder level, can be denied selected shareholders, if that is thought desirable. This has two important implications.

First, integration under the split-rate or dividend-paid deduction system would provide tax-exempt organizations, including charitable foundations, pension funds, etc. large wind-fall gains, unless the tax treatment now accorded them was drastically changed. On the other hand, gross-up and credit need not be extended to these organizations on the same terms as it is made available to other taxpayers, and it could even be denied altogether. The second important difference is in the tax treatment of dividends paid to foreigners. Relief from the corporation income tax could be made contingent upon reciprocity if the imputation method were chosen, but would be automatic and unilateral under the split-rate system. These two issues involve large amounts of revenue, basic issues in the proper tax treatment of presently preferentially treated organizations, and international fiscal relations.[14/]

Because of the possibility that the two theoretically equivalent approaches to relieving double taxation of dividends might actually have

somewhat different effects, the Ford administration proposed that they be combined. That is, under the administration proposal the corporation would be allowed deduction for about half of its dividends and the individual shareholder would be allowed gross-up and credit for half of dividends received.[15/] The result would be the complete elimination of the double taxation of dividends. This proposal would not, however, have extended integration to retained corporate-source income.

It was noted above that complete integration of the corporate and personal income taxes would result in the elimination of the distortions of resource allocation and financial structure and the inequities that are now produced by the existing classical system. Full integration is therefore much to be desired. But an important policy question is the extent to which the advantages of full integration can be achieved if integration is limited to dividends only, as in most countries. Though there is little literature addressed to this question, we should be able to make some informed judgements on the matter. First, double taxation of dividends would be reduced or eliminated. The existing pressures for retention of earnings would therefore be reduced. Similarly, the tax-induced stimulus to excessively high debt-equity ratios would also be reduced, or even reversed. The misallocation of capital between corporate equity and other investments should be reduced considerably, and it too could be reversed. Finally, over-taxation of the corporate sector would be reduced, especially for industries characterized by historically high ratios of dividends to earnings. In summary, it would appear that the allocative benefits from integration for dividends only would be quite

similar to those for complete integration.[16/] The primary allocative problem still remaining would seem to be the (considerably lessened) tax incentive for high income individuals to invest in firms with low payout ratios and the corresponding tax pressures for low income individuals to invest in firms with high payout ratios. (The latter pressure would actually be increased by partial integration.)

Whether on equity grounds partial integration would be advantageous depends in part upon one's point of view. Elimination of the corporation income tax on distributed corporate-source income would produce a pattern of marginal tax rates on this income that resembled more closely the statutory personal rates, and therefore is much to be applauded. And in fact, seen from this point of view, the main problem with integration for dividends only is that, by not applying to retained corporate-source income, it does not go far enough. There is, of course, another less pleasing aspect of the distributional implications of integration. This is that the advantages of dividend relief would be received largely by high income individuals. This is most clearly the case if the advantages of integration were to accrue only to recipients of dividend income, but it would also be true even if the advantages were diffused somewhat more broadly to all owners of capital, as the above discussion of Harberger-type shifting suggests would occur. (The reduction in progressivity would be somewhat less if integration extended to retained earnings, because of the implicit taxation of long term capital gains at ordinary rates and on an accrual basis, since such gains are especially important at the upper end of the income distribution.)

One need not be schizophrenic to worry about the reduced progressivity of the income tax resulting from integration while applauding the positive effects on resource allocation and the narrowing of differentials between statutory and effective tax rates on corporate source income. Thus it is not unreasonable to advocate that integration, whether partial or complete, and whether limited to dividends or extended to retained earnings, should be accompanied by meaningful tax reforms that would reduce the important tax preferences of value primarily to upper income groups. This is not the place to discuss the entire array of possible tax reforms, but we should at least note that tax reform and integration are cut from the same cloth.[17/] That is, the basic rationale for both is to tax all economic income accruing to individuals under a comprehensive definition of income at the full statutory rates that presumably reflect what society, or at least the Congress, believes to be equitable. Neither an unintegrated corporation income tax nor existing tax preferences, including especially those pertaining to long term capital gains, are consistent with such a view.

IV. The Tax on Value Added[18/]

The tax on value added, which is one of the important mainstays of the tax systems of European countries, is virtually untried in this country and is largely unknown, except to a few specialists in the economics of taxation.[19/] The TVA is not really levied on some new, different, or exotic tax base, as the name might tend to suggest. Rather it is simply a different means of collecting a general tax on sales.[20/] Comparison with the retail sales tax found in many American states should help to make this clear.

Suppose that a given product passes through three stages in the process

of being produced and distributed. For simplicity we can call these manufacturing, wholesaling, and retailing, and assume that the manufactured good is sold to wholesalers at $50 per unit, to retailers at $80 per unit and to consumers for $100 per unit. Under a 10 percent sales tax $10 would be collected upon the $100 sale of the good by retailers to ultimate consumers. By comparison, proceeds from a 10 percent TVA would be collected on value added at each stage of the production-distribution process. In the example just given, value added at the manufacturing stage is $50, that at the wholesale level is $30, and the retailer adds $20 to the value of the product. Thus under a 10 percent tax on value added $5 would be collected at the manufacturing stage, $3 at the wholesale stage, and $2 from retailers, or a total of $10.[21/] From this example we see that the same amount of revenue would be collected from either the retail sales tax or the tax on value added.

Once it is recognized and accepted that the tax on value added is, as just demonstrated, merely a form of general sales tax, its appraisal is much simplified, for the similarities of the tax on value added and the retail sales tax make clear both the advantages and the disadvantages of the former.[22/] The most obvious advantage of the value added tax is its neutrality. That is, in its pure form the tax on value added, like any general sales tax, being levied at the same rate of all products, does not interfere with consumer choices between various goods and services.[23/] Nor does it distort producers' choices of how most economically to produce a given set of outputs. This is, of course, in marked contrast to the non-neutrality characteristic of the classical corporation income tax, described in section II above.

The neutrality of the TVA is, however, purchased at a fairly high price in terms of vertical equity. Being a general tax on consumption, the TVA imposes a burden that, measured as a percentage of income, declines as income rises. This is in marked contrast to the incidence of the corporation income tax - unless the latter is also shifted to consumers (or to workers). This regressivity can be diminished somewhat by exempting certain items of basic consumption from the tax, or by taxing them at preferential rates.[24/] But differential taxation of various goods and services can detract greatly from the inherent neutrality of the tax and can considerably complicate tax administration and compliance.[25/] It is thus preferable that the regressivity of the TVA be offset not by exemptions and preferential rates, but by combining the tax with an increase in the progressivity of other taxes, especially the income taxes. Since the tax on value added would be especially burdensome at the bottom of the income distribution, it is particularly important that its imposition (or any other general federal consumption tax) be accompanied by a system of refundable tax credits under the income tax or a negative income tax. Thus we see that tax reform, which is a necessary companion of integration of the income taxes, should also be a component part of any plan to impose an American tax on value added.

Finally, the similarity between the tax on value added and the retail sales tax raises a fundamental question: If the U. S. is to have a federal sales tax, why use the TVA rather than the more familiar tax on retail sales? There are some good answers to this question, among them, the greater ease of eliminating pyramiding of taxes on intermediate and capital goods under the technique used to collect the value added tax.[26/]

But most of the early appeals for substitution of TVA for the corporation income tax were much less sophisticated than this. That is, the appeal seems to have been based upon four points, a) that the TVA is neutral, b) that it would encourage saving, c) that its adoption would improve the U. S. balance of payments, and d) that the Europeans were doing it, so it must be good. We have seen already that the first of these is indeed a valid reason for considering adoption of a TVA, and substitution of a TVA for part of existing income taxes would probably raise the rate of saving somewhat (unless the income tax is shifted to consumers). But we shall see below that the third appeal is of questionable merit, and that European use of the TVA is largely irrelevant for U. S. tax policy. Finally, early advocates of the value added tax hardly ever noted - if indeed they realized it - that any economic effects of the TVA - including neutrality and effects on saving and the balance of payments - would almost certainly be shared by a federal retail sales tax. Given American familiarity with the latter form of sales tax and the greater ease of coordinating federal and state sales taxes under the retail sales tax, one can argue persuasively that <u>if</u> the U. S. were to adopt a federal sales tax, it should be levied at the retail level rather than through use of the value added technique.[27/]

The tax on value added was first seriously proposed in the United States as a means of improving the balance of payments. Though the argument varied considerably in its sophistication, an accurate portrayal of the general theme would probably run as follows:

> The corporation income tax is shifted to consumers in the form of higher prices. The value-added tax would also be shifted to consumers. Thus the two taxes would

> have similar effects on the general level of prices of goods produced and sold domestically. But they would affect prices of imports and exports differently. In order that imports and domestic goods be treated similarly, the TVA is applied to imports. Similarly, it is rebated on exports so that they occur tax-free.[28/] Analogous "border-tax adjustments" are not allowed for corporation income taxes. Therefore replacing the corporation income tax with a TVA would make imports less competitive and exports more competitive and improve the balance of payments.[29/]

It is readily apparent that this argument is equally applicable to a retail sales tax and that it depends crucially upon the assumption that the corporation income tax is shifted forward in higher prices. If the corporation tax is not shifted, substitution of TVA for the corporation income tax would have little effect on the balance of payments. Given the uncertainty about the short-run incidence of the corporation income tax noted in section II above, the postulated improvements in the balance of payments might not be forthcoming if the tax substitution were made. Even more important, it can be argued that the tax substitution should not necessarily occur even if the balance of payments effects were known to be favorable. It seems inappropriate for a country such as the U. S. that relies relatively little upon international transactions to base such an important decision of tax policy upon expected balance of payments effects.

European countries adopted the tax on value added for reasons that are largely irrelevant in the United States. Inputs to the decision were a) pre-existing national consumption taxes, levied in many cases upon gross receipts, that yielded significant revenues, b) a desire to harmonize indirect taxes within the European Common Market, and c) the general belief that taxpayer morality and accounting practices would not support the burden imposed by collection of retail sales taxes. Given this consellation of restrictions, the TVA may have been the only way to go. It avoided the notorious defects of the so-called cascade or turnover taxes then in use,[30/] it provided the basis for harmonization within the EEC,[31/] and it had self-enforcement features deemed to be valuable. By comparison, in the United States there is no defective federal consumption tax that needs to be replaced, there is no question of harmonization of U. S. consumption taxes with those of other nations, and the strong tradition of retail sales taxation at the state level suggests both that a federal retail sales tax could be administered and that federal-state coordination would be easier under the retail tax. In short, in contrast to the situation with regard to integration of the income taxes, it seems that European experience is of little relevance to an American appraisal of TVA. It is not clear either that the United States needs a general consumption tax or that the TVA would be the appropriate form if such a tax were needed.

V. TVA and Integration Combined

If the corporation income tax were known to be shifted to consumers, its continued use would make no sense and it could well be replaced with a general sales tax. Neutrality would be improved, the balance of payments effect would be favorable, and there would be no cost in terms of vertical

equity. If, on the other hand, the corporation tax is not shifted in the short run, as seems more likely, the attraction of such a substitution would be much reduced. Neutrality would be enhanced, but the balance of payment effects would be minimal and the cost in terms of equity would be enormous. Thus a lacuna in our knowledge of the incidence of the corporation income tax seems at first glance to leave us with no guide for policy in this area. But in fact if we view the issue somewhat differently we are on somewhat firmer ground.

We have seen above that the existing classical system of taxation of corporate-source income creates both distortions and inequities and makes little sense, whether the corporate tax is shifted or not. Thus one of the first orders of business in U. S. tax policy should be to integrate the corporate and personal income taxes. Total integration extending to retained earnings is to be preferred, but even partial integration for dividends only would be a step in the right direction. Of course, integration must be accompanied by elimination of tax preferences of special advantage to upper income classes if it is not to be unacceptable on equity grounds. These reforms would need to be more extensive under dividend relief than under total integration, since the latter is economically equivalent to taxing long term capital gains at ordinary rates as they accrue.

Thus for there seems to be no place for a general sales tax. In that integration must be coupled with tax reform to provide an acceptable package, this assessment is probably valid. Using the TVA or any other form of sales tax to recoup part of the revenue lost in integration would probably make it almost impossible to maintain an acceptable degree of progressivity in

federal taxation unless refundable credits or a negative income tax were also added to the tax reform package.[32/] But initiation of a negative income tax would take us into welfare reform and a reassessment of social security. As desirable as such a once-and-for-all rationalization of federal finance would be, it is almost certainly not in the cards. But a piecemeal approach that combined only integration and tax reform would be attractive by itself - if not politically probable.

Footnotes

1/ For more detailed discussions of the effects of the corporation income tax, see McLure (1975) and 1976) and literature cited there.

2/ This statement neglects the preferential (20-22 percent) rates applied to the first $50,000 of corporate income. Moreover, the average effective rate of all U. S. corporations is actually only about 40 percent. But for many purposes the marginal rate, which is usually closer to 48 percent, is more relevant.

3/ The maximum rate can actually go as high as 36.5 percent, because the excluded half of long term capital gains falls within the base of the 10 percent minimum tax on preference income (but the tax paid on the included half of gains is deductible). This complication, as well as the 25 percent alternative tax on the first $50,000 of gains, is ignored here.

4/ Tables showing these effects, the mechanics of various schemes of integration, and the basic principles of value added taxation are contained in appendix tables. See table A for illustration of the points made in this and the following four paragraphs.

5/ See Harberger (1966) and Shoven (1975).

6/ See Break (1974) for a survey of efforts to determine the incidence of the corporation income tax. Our virtually total ignorance of the incidence of the corporation income tax provides a strong argument for elinimating the tax, except as a withholding device.

7/ This process was first analyzed in detail in Harberger (1962). For a more elementary exposition of the model used by Harberger, see McLure and Thirsk (1975).

8/ The tax-induced reallocation of capital could also cause wage rates to be affected (either positively or negatively). But given the values of key parameters in the U.S. economy, it seems unlikely that this occurs to any great extent, and therefore it is ignored. Similarly, because the cost of capital in the corporate and non-corporate sectors is influenced differently by the corporation and personal income taxes, it can be expected that relative to prices of non-corporate goods, prices of corporate goods are higher than they would be under a neutral income tax. While this distortion of relative prices is important in terms of welfare loss induced by the corporation income tax, it is unlikely to matter very much from a distributional point of view. That is, it is unlikely that the fractions of total goods and services produced in the corporate and non-corporate sectors in the market baskets of readily definable socio-economic groups in the economy differ significantly. Stated still differently, any consumer burdens implied by higher prices for corporate goods and services would be roughly offset by consumer benefits resulting from lower prices for non-corporate products, unless market baskets differ substantially. For a more extensive discussion of this issue, see Musgrave (1959) and Harberger (1962).

9/ Table B illustrates the results summarized in the remainder of this section.

10/ A more detailed discussion of methods of integrating the income taxes and further references to European and Canadian experience are contained in McLure (1975) and (1976). Among the most important of the latter are Organization for Economic Cooperation and Development (1973), "A Comparative Analysis..." (1974), Sato and Bird (1975) and Hammer (1975).

11/ An analogy with withholding taxes on labor income should help to clarify this approach. Gross wages are included in taxable income, but credit is allowed for taxes withheld. Since the dividend received by (retention allocated to) a shareholder is net of the corporation income tax, it must be "grossed-up" by the amount of the tax before being included in taxable income. Table C illustrates the Carter approach to complete integration, as well as the imputation method of providing relief from double taxation of dividends.

12/ The differential is actually somewhat smaller than it appears because profits used to pay the tax on distributed earnings are subject to the 51 percent rate. Table D illustrates the split-rate method of partial integration. It is shown there that 23.4 percent of corporate-source income flowing into dividends is paid as corporate taxes.

13/ The dividend-paid deduction is illustrated in Table E.

14/ For a somewhat more extended discussion of these issues, see McLure (1975) and (1976) and Break and Pechman (1975). For an excellent analysis of the highly complicated question of the implications of integration for international fiscal relations, see Bird and Sato (1975). Extending full integration to dividends paid to tax-exempt organizations would increase the revenue loss by some $12 billion.

15/ See Table F for an illustration of the administration's proposal for dividend relief.

16/ It should also be noted, however, that, contrary to pronouncements by the Ford administration, neither total integration nor integration for dividends only is likely to increase private saving, unless revenues are reduced.

17/ Among the classic works on the so-called Haig-Simon definition of income are Simon (1938) and (1950) and more recently the Carter Report in Canada (1966). For a good textbook discussion see Musgrave and Musgrave (1973). Break and Pechman (1975) calculate that reform and total integration could be combined in such a way as to involve no net revenue loss and change the distribution of tax burdens by income classes only minimally, even if the top bracket rate were reduced to 53 percent. The reform would, of course, be extensive.

18/ For more detailed expositions of the TVA and its advantages and disadvantages, see McLure (1972) and (1973a). For a brief summary of the American debate over value-added taxation, see McLure (1973b). Table G illustrates the working of the tax as applied in Europe.

19/ Whereas 19 percent of revenues collected by all levels of government in the United States in 1972 were from consumption taxes, the corresponding percentages in Europe range from 28 to 41. The majority of these taxes are selective excises and retail sales taxes collected at the state and local level in the United States. On the other hand the TVA accounts for the great bulk of indirect taxes in European countries. See Break and Pechman (1975).

20/ Strictly speaking, this statement is applicable only to the consumption-type TVA, which is the form used in Europe and the most relevant alternative for consideration in the United States. Other variations are the income, wage, and GNP types of TVA, but only the first of these is a reasonable alternative to the consumption type.

21/ As a practical matter, the firm does not actually calculate its value added and then apply the tax rate. Rather, it incurs a provisional tax liability equal to the tax rate times its gross sales. Then it receives a credit equal to the amount of tax paid on its purchases, as shown on invoices. (See also the example of Table G.) The necessity of being able to document taxes paid is said to generate a strong tendency to self-enforcement. That is, the supplier must remit to the Treasury the taxes shown on the invoices demanded by his customers.

22/ It would be misleading to leave the impression that the TVA is identical to the retail sales tax. Because of technical problems of tax administration the two forms of sales tax will have somewhat different impacts upon intermediate and capital goods, farmers, and financial institutions, for example. Nonetheless, for purposes of evaluating the desirability of the TVA it seems best to ignore these differences.

23/ Because the TVA cannot extend to leisure, it is not truly general and there is really no firm theoretical foundation for preferring a tax that applies at the same rate to all goods and services, unless the labor supply is not responsive to wage rates. Nevertheless, there seems to be merit in taxing all goods and services at the same rate. Some goods and services (e.g., food consumed on farms, domestic services, and imputed rent on owner-occupied homes) would probably be exempt for administrative reasons. Thus the tax would not be completely general.

24/ Among the items that might be exempted in the interest of reducing progressivity are food for home preparation, some public utilities, medical expenses, public transportation fees, etc. Thus only some 50-60 percent of total consumption might be taxed. See McLure (1973) and Musgrave and Musgrave (1973) for estimates of the incidence of a TVA levied without exemptions, with exemptions for food, with a refundable credit, and with more far-reaching schemes to relieve regressivity. Beyond the scope of this paper is the possibility that a progressive expenditure tax might be used to augment or replace part of income tax revenues.

25/ For a discussion of the techniques and difficulties of providing exemptions and preferential rates, see McLure (1972).

26/ For a strong argument along these lines, see Shoup (1973).

27/ Relevant to this discussion are McLure (1971) and Due (1973).

28/ Without these compensating import duties and export rebates (so-called border tax adjustments) a given product would bear the taxes levied by its country of origin. The border tax adjustments are needed so that a product moving in international trade will bear the taxes levied in the country of destination, as is allowed by the General Agreement on Tariffs and Trade. Thus they convert an origin principle or production tax to a destination principle or consumption tax. Being levied only upon sales to ultimate consumers (at least in principle) the retail sales tax is automatically a destination-principle tax, even without the use of border tax adjustments, which, in fact are unnecessary.

29/ Less sophisticated versions of the argument were based upon failure to distinguish the border tax adjustments described above from customs

29/(continued)
duties and export subsidies. This confusion led some advocates to believe that TVA would improve the balance of payments, independently of the context in which it was imposed. Presumably the same argument would not have been made for the economically equivalent retail sales tax.

30/ Turnover taxes levied on gross receipts favor vertically integrated production processes, result in different tax burdens on different products, and render accurate border tax adjustments impossible.

31/ See the Report of the Neumark Committee (1963).

32/ It might be argued that a federal sales tax is needed to finance increased public spending. This does not ring true at a time when the President is vetoing many bills that would increase spending and taxes are being cut to fight recession. In this regard it is interesting to note that some early advocates of the TVA have since come to oppose the tax precisely because of fear that it might be used to finance higher federal expenditures.

References

Break, George, "The Incidence and Economic Effects of Taxation," in Alan S. Blinder, et al., The Economics of Public Finance, Brookings Institution, Washington, 1974, pp. 119-37.

Break, George F. and Pechman, Joseph A., Federal Tax Policy: The Impossible Dream? Brookings Institution, Washington, 1975.

Due, John F., "The Case for the Use of the Retail Form of Sales Tax in Preference to the Value-Added Tax," in Richard A. Musgrave, editor, Broad Based Taxes: New Options and Sources, Johns Hopkins University Press for Committee for Economic Development, Baltimore, 1973, pp. 205-13.

Hammer, Richard M., "The Taxation of Income from Corporate Shareholders: Review of Present Systems in Canada, France, Germany, Japan, and the U.K.," National Tax Journal 28 (September 1975), pp. 315-34.

Harberger, Arnold C., "The Incidence of the Corporation Income Tax," Journal of Political Economy, 70 (June, 1963), pp. 215-40.

Harberger, "Efficiency Effects of Taxes on Income from Capital," in Marian Krzyzaniak, editor, Effects of Corporation Income Tax, Wayne State University Press, Detroit, 1966, pp. 107-17.

McLure, Charles E., Jr., "TVA and Fiscal Federalism," 1971 Proceedings of the National Tax Association, pp. 26-33.

McLure, Charles E., Jr., "The Tax on Value Added: Pros and Cons," in Charles E. McLure, Jr. and Norman True, The Value Added Tax: Two Views, American Enterprise Institute, Washington, 1972, pp. 1-68.

McLure, Charles E., Jr., "Economic Effects of Taxing Value Added," in Richard A. Musgrave, editor, Broad-Based Taxes: New Options and Sources, Johns Hopkins Press for the Committee for Economic Development, Baltimore, 1973, pp. 155-204. (a)

McLure, Charles E. Jr., "A Federal Tax on Value Added: U. S. View," 1973 Proceedings of the National Tax Association - Tax Institute of America, pp. 96-103. (b)

McLure, Charles E., Jr., "Integration of the Personal and Corporate Income Taxes: The Missing Element in Recent Tax Reform Proposals," Harvard Law Review 88 (January 1975), pp. 532-82.

McLure, Charles E. Jr., "Integration of the Income Taxes: Why and How," Journal of Corporate Taxation, Winter 1976.

McLure, Charles E., Jr., and Thirsk, Wayne R., "A Simplified Exposition of the Harberger Model, I: Tax Incidence," National Tax Journal 28 (March 1975), pp. 1-27.

Musgrave, Richard A. and Musgrave, Peggy B., Public Finance in Theory and Practice, McGraw-Hill, New York, 1973.

Organization for Economic Development and Co-operation, Company Tax Systems in OECD Member Countries, Paris 1973.

"Report of the Fiscal and Financial Committee (Neumark Committee)," The EEC Reports on Tax Harmonization, International Bureau for Fiscal Documentation, Amsterdam, 1963.

Report of the Royal Commission on Taxation (Carter Commission), Vol. 4, Queen's Printer, Ottawa, 1966.

Sato, Mitsuo, and Bird, Richard M., "International Aspects of the Taxation of Corporations and Shareholders," IMF Staff Papers, 22 (July, 1975), pp. 384-455.

Shoup, Carl S., "Factors Bearing on an Assumed Choice between a Federal Retail-Sales Tax and a Federal Value-Added Tax," in Richard A. Musgrave, editor, Broad-Based Taxes: New Options and Sources, Johns Hopkins University Press for Committee for Economic Development, Baltimore, 1973.

Shoven, John B., "The Incidence and Efficiency Effects of Taxes on Income from Capital," Technical Report No. 173, Institute for Mathematical Studies in the Social Sciences, Stanford University, Stanford, California, July 1975.

Simons, Henry, Personal Income Taxation, University of Chicago Press, Chicago, 1938.

Simons, Henry, Federal Tax Reform, University of Chicago Press, Chicago, 1950.

"A Comparative Analysis of the Classical, Dual Rate, and Imputation Systems, and an Examination of the Corporate Tax Systems in Belgium, France, Germany, Italy, The Netherlands and The United Kingdom," European Taxation, May-June 1972, pp. 112-74.

Table A

Taxation of $100 of Corporate-Source Income
under Present Law: Tax Borne by Shareholders

1.	Dividend payout rate	Zero			100 percent		
2.	Shareholder's marginal tax rate[a/]	0	20	70	0	20	70
3.	Corporate-source income[a/]	100	100	100	100	100	100
4.	Corporation income tax (at 48 percent)	48	48	48	48	48	48
5.	Net corporation income	52	52	52	52	52	52
6.	Dividends	*	*	*	52	52	52
7.	Retained earnings (=capital gains)[b/]	52	52	52	*	*	*
8.	Personal tax on dividends	*	*	*	0	10.4	36.4
9a.	Maximum tax on LTCG[c/]	0	5.2	18.2	*	*	*
9b.	Minimum tax on LTCG[d/]	0	0	0	*	*	*
10a.	Total: with max. tax on LTCG[e/]	48	53.2	66.2	48	58.4	84.4
10b.	Total: with min. tax on LTCG[e/]	48	48	48			
11a.	Overtaxation: max. tax on LTCG[f/]	48	33.2	-3.8	48	38.4	14.4
11b.	Overtaxation: min. tax on LTCG[f/]	48	28	-22			
12a.	Percentage overtaxation: max. tax on LTCG[f/]	∞[g/]	166.0	-5.4	∞[g/]	192.0	20.6
12b.	Percentage overtaxation: min. tax on LTCG[f/]	∞[g/]	140.0	-31.4			

*Not applicable.

a/Shareholder's marginal tax rate is assumed invariant with regard to inclusion of corporate-source income and throughout the taxpayer's life. Statutory corporate rate is assumed to be effective marginal rate.

b/Assumes retained earnings give rise to capital gains on a dollar-for-dollar basis, on the average.

c/LTCG=Long Term Capital Gains. Assumes gain is realized after passage of 6-month holding period, but within taxable year in which it accrues. Short term gains are taxed like dividends.

d/Assumes appreciated asset is transferred at death.

e/Includes both corporation and personal income tax(line 4+line 8+line 9(a or b)).

f/Comparison is with statutory marginal tax rates in line 2.

g/Percentage overtaxation of zero-bracket taxpayer is infinite.

Table B

Taxation of $100 of Potential Capital Income,
Assuming Partial Shifting to Non-Corporate Capital[a/]

1. Sector	Corporate						Non-corporate[b/]		
2. Payout ratio	Zero			100 percent					
3. Marginal tax rate	0	20	70	0	20	70	0	20	70
4. Potential capital income	100	100	100	100	100	100	100	100	100
5. Gross capital income	146.2	146.2	146.2	146.2	146.2	146.2	76	76	76
6. Corporate income tax (at 48 percent)	70.2	70.2	70.2	70.2	70.2	70.2	*	*	*
7. Capital income, net of corporate income tax	76	76	76	76	76	76	76	76	76
8. Dividends	*	*	*	76	76	76	76	76	76
9. Retained earnings	76	76	76	*	*	*			
10. Personal tax on dividends	*	*	*	0	15.2	53.2			
11. Tax on long term capital gains:									
a. Maximum	0	7.6	26.6	*	*	*	0	15.2	53.2
b. Minimum	0	0	0	*	*	*			
12. Net personal income,									
a. Max. tax on LTCG	76	68.4	49.4	76	60.8	22.8	75	60.8	22.8
b. Min. tax on LTCG	76	76	76						
13. Effective tax rate[c/]									
a. Max. tax: LTCG	24	31.6	50.6	24	39.2	77.2	24	39.2	77.2
b. Min. tax: LTCG	24	24	24						
14. Overtaxation[c/]									
a. Max. tax: LTCG	24	11.6	-19.4	24	19.2	7.2	24	19.2	7.2
b. Min. tax: LTCG	24	4	-46						

*Not applicable

a/ This illustrative example is based on the following assumptions: Cobb-Douglas utility function and production functions and equal pre-tax capital stocks in the two sectors. Thus the 48 percent tax on capital in the corporate sector, when diffused, has the same effects as a 24 percent tax on all capital. For amore detailed exposition of this reasoning see Charles E. McLure, Jr. and Wayne Thirsk, "A Simplified Exposition of the/ I: Tax Harberger Model Incidence," National Tax Journal, March 1975, pp. 1-27 . Footnotes a to f from Table A are relevant here in the analogous situations, but are not repeated.

b/ "Non-corporate" sector includes corporate debt securities.

c/ Relative to potential capital income of 100.

Table C

Taxation of $100 of Corporate-Source Income, under Imputation Method and Carter Commission Proposal[a]

		Zero			100 percent[a]		
1.	Payout rate						
2.	Marginal personal tax rate[b]	0	30	50	0	30	50
3.	Corporate source income	100	100	100	100	100	100
4.	Corporation income tax (at 50%)[b]	50	50	50	50	50	50
5.	Net corporation income	50	50	50	50	50	50
6.	Dividends	*	*	*	50	50	50
7.	Retained earnings[c]	50	50	50	*	*	*
8.	Grossed-up dividends or retained earnings[c/d]	100	100	100	100	100	100
9.	Gross personal tax liability	0	30	50	0	30	50
10.	Credit for corporation tax[e]	50	50	50	50	50	50
11.	Net personal tax liability[e]	-50	-20	0	-50	-20	0
12.	Total tax liability	0	30	50	0	30	50

[a] 100 percent payout columns can be employed to illustrate imputation (credit with gross-up) method.

[b] Top marginal tax bracket assumed to be equal to corporate tax rate.

[c] It is assumed in Carter proposal that all retained earnings would be allocated to shareholders for tax purposes. Basis of corporate shares would be written up by amount of grossed-up allocations.

[d] Dividends and allocations are grossed up by using the following formula: $G=N/(1-c)$, where G and N are, respectively, gross and net values of dividends and allocations and c is the corporate tax rate. Effective and statutory corporate tax rates are assumed to be equal.

[e] Credit is assumed to be refunded if it exceeds total personal tax liability.

Table D

Taxation of $100 of Distributed Corporate-Source Income under Split-Rate Approach[a/]

1. Payout rate	100%		
2. Individual marginal tax rate	0	20	70
3. Corporate source income	100	100	100
4. Dividends[b/]	76.6	76.6	76.6
5. Undistributed earnings[b/]	23.4	23.4	23.4
6. Tax on dividends (at 15%)	11.5	11.5	11.5
7. Tax on retentions (at 51%)	11.9	11.9	11.9
8. Total corporate tax[b/]	23.4	23.4	23.4
9. Net corporate income[b/]	76.6	76.6	76.6
10. Personal income tax	0	15.3	53.6
11. Total tax	23.4	38.7	77.0
12. Total tax under classical system[c/]	51.0	60.8	85.3

[a/] The illustration is based upon rates prevailing in Germany.

[b/] The dividend figure shown in line 4 is the net corporate income in line 9. Undistributed earnings consist entirely of earnings required to pay the 15 percent tax on dividends and the 51 percent tax on those undistributed earnings. Thus line 5 equals line 8.

[c/] 51.0 + 49 times marginal personal tax rate. 54 percent of overtaxation is eliminated.

Table E

Taxation of $100 of Distributed Corporate-Source Income Assuming Deduction for 50 Percent of Dividends Paid[a]

1. Payout rate	100%		
2. Individual marginal tax rates	0	20	70
3. Corporate-source income	100	100	100
4. Dividend deduction (at 50%)	34.2	34.2	34.2
5. Taxable corporate income	65.8	65.8	65.8
6. Corporate tax (at 48%)	31.6	31.6	31.6
7. Net income = dividends	68.4	68.4	68.4
8. Personal income tax	0	13.7	47.9
9. Total tax	31.6	45.3	79.5

[a] Approximately 34 percent of the overtaxation indicated in Table A is eliminated in all income classes. With a corporate tax rate of 50 percent, deduction of 2/3 of dividends paid would eliminate 50 percent of overtaxation.

Table F

Taxation of $100 of Distributed Corporate-Source Income Under the Administration Proposal for Integration[a/]

1.	Payout rate		100%	
2.	Individual marginal tax rate	0	30	70
3.	Corporate-source income	100	100	100
4.	Deduction for 50% of dividends	$33\frac{1}{3}$	$33\frac{1}{3}$	$33\frac{1}{3}$
5.	Taxable corporation income	$66\frac{2}{3}$	$66\frac{2}{3}$	$66\frac{2}{3}$
6.	Corporation income tax	$33\frac{1}{3}$	$33\frac{1}{3}$	$33\frac{1}{3}$
7.	Net corporation income	$66\frac{2}{3}$	$66\frac{2}{3}$	$66\frac{2}{3}$
8.	Dividends	$66\frac{2}{3}$	$66\frac{2}{3}$	$66\frac{2}{3}$
9.	Gross-up (50% of dividends)	$33\frac{1}{3}$	$33\frac{1}{3}$	$33\frac{1}{3}$
10.	Grossed-up dividends	100	100	100
11.	Gross personal income tax liability	0	30	70
12.	Credit for corporation tax	$33\frac{1}{3}$	$33\frac{1}{3}$	$33\frac{1}{3}$
13.	Net personal tax liability	$-33\frac{1}{3}$	$-3\frac{1}{3}$	$36\frac{2}{3}$
14.	Total tax liability (6-13)	0	30	70

[a/] Based upon assumption that the statutory tax rate is also the effective rate and (for simplicity) using a 50 percent statutory corporate rate rather than a 48 percent rate.

Table G

Illustration of Tax on Value Added,
as Employed in Europe

		A	B	C	Total
1.	Stage of production				
2.	Sales, of which	300	700	1,000	2,000
	a. Intermediate goods	300	500	-	800
	b. Capital goods	-	200	-	200
	c. Consumer goods	-	-	1,000	1,000
3.	Purchased inputs, of which	-	300	700	1,000
	a. Intermediate goods	-	300	500	800
	b. Capital goods	-	-	200	200
4.	Value added[a/]	300	400	300	1,000
5.	Gross tax on sales (at 10%)	30	70	100	200
6.	Tax credit on purchases	0	30	70	100
7.	Net TVA liability	30	40	30	100
8.	Retail sales tax (at 10%)[b/]	0	0	100	100

[a/] Sales minus purchases, line 2 minus line 3. Value added is defined under the consumption base.

[b/] Assumes that retail sales tax applies only to sales to ultimate consumers.

Comments on Charles McLure, Jr.,
"U.S. Taxation of Business:
Relevance of the European Experience."

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Professor McLure has written a highly competent and readable paper, which suffers however from an apparent failure of communication since much of the discussion deals with issues limited to U.S. taxation problems and as I understand it this conference was meant to focus on issues which involve West Germany. The situation is heavily reminiscent of the predicament that all teachers occasionally encounter, where the student writes a good answer to the wrong question.

This kind of situation usually means that the discussant must develop a strategy: mine will be to omit discussion of points which are purely of interest to those interested in the structure of American taxation (with a small exception or two), but instead to relate the discussion to international ramifications of questions raised by McLure and also to add a few speculations of my own about the impact of the structure of U.S. and German taxes on international economic relationships between the two countries.

In his paper, Professor McLure places considerable emphasis upon problems associated with the "non-integration" of the corporate income tax (as opposed in part to European practice) wherein it is necessary to deal with the classical problem of double taxation. Most economists who study taxation would prefer an integrated system, where income is treated as income no matter what its source. The virtues of this have been widely discussed in the literature, especially since the Carter Commission in Canada recommended such a plan in 1966. Under such a system, if a corporate shareholder receives dividends from a corporation which has already

paid a corporate profits tax, for taxation purposes it would be assumed that the shareholder receives the appropriate amount of income gross of taxes but that he or she has paid taxes in the amount of the difference between the gross figure and the amount of dividends actually received. McLure argues that one difficulty with the integrated procedure is that it would involve revenue loss and additional regressivity, assumptions which I would like to see supported somewhat better, since presumably one could deal with both problems by adjusting the rates.

In discussing the corporate income tax one cannot go very far before getting into the question of shifting, and of course under some shifting assumptions the double taxation argument disappears. Professor McLure's discussion of the shifting possibility is adequate, although I have something of a stylistic quibble concerning how he does this, since he only admits of the possibility that there may be no problem in the middle of the paper after having already discussed the evils of the situation at length in the first part.

But the shifting assumptions concerning the corporate income tax are also quite relevant to some of the international issues being discussed at this conference. To begin with we should restate the implications of Harberger's analysis of this question, which is one that is widely accepted. What Harberger concludes in effect is that capital owners pay the tax because of the decreased demand for capital <u>in general</u>. The idea is that investors do not accept a lower after-tax rate of return. If the going rate of return is 8 percent and a 50 percent corporate profits tax is levied, then projects will be put into place only up to the point where the gross rate of return is 16 percent. This reduces the demand for capital in general, which reduces its price, an effect which falls on

all capital owners.

Now what happens to commodity prices? Even though Harberger demonstrates to the satisfaction of many that capital owners pay the tax, it is still true that prices of corporate products increase substantially, enough in fact to allow corporations to attain a 16 percent pre-tax rate of return in my example given above. But to counterbalance this increase, there is a corresponding price decrease (at least in relative terms) on non-corporate products, which come to almost half the total (the professions, agriculture, and real estate mostly), and since about 70 percent of U.S. exports are in the manufacturing sector (which is almost entirely incorporated), the tax has the net effect of making U.S. export prices higher and thus should adversely affect the balance of payments with respect to Germany and similar countries. (Notice that there is a price advantage for agricultural products to the extent that agriculture is not incorporated.)

This argument would only be correct of course insofar as Germany did not also have a corporate income tax, which is not so. In point of fact, Germany has a corporate tax with marginal rates as high as 51 percent. But while this is true, it is also quite misleading. As Professor McLure points out, Germany has a partially integrated system such that income paid out as dividends is only taxed at a 15 percent rate. This makes quite a large difference. Probably the best way to ascertain the total impact of a tax is to look at its size with relationship to the GNP. I have figures for the ratio of GNP represented by corporate tax collections in both countries in 1971: for Germany this is 1.5 percent and the U.S. 2.7 percent. In some recent years the U.S. figure has ranged as high as 4.0 percent but never much lower than the 2.7 percent figure. It seems

conclusive that the tax in Germany is less than half of what it is in the U.S.

What we have then is the equivalent of a selective origin tax. German consumers find U.S. manufactured goods more expensive and substitute their own; it is the equivalent of a German tariff on U.S. manufactured goods, and of course has the distortive effects normally associated with such tariffs. To be neutral the U.S. should be giving an export subsidy on manufactured goods. Maurice Weinrobe has estimated that if the corporate income tax were replaced with an indirect tax such as the value added tax (with export rebates), it would have made a difference of $5 billion in the U.S. balance of trade in 1963.[1] The magnitude of this effect seems to be at variance with one of McLure's conclusions, by the way.

It is also of more than passing interest that average effective corporate tax rates would appear to vary greatly from industry to industry. Siegfried has made some computations and found that with a mean tax rate of 39.4 percent one standard deviation (between industries) was 6.82 percentage points.[2] Those on the low side included coal mining, petroleum, nonferous primary metals, electronic components, agricultural chemicals, logging and wood products, and copper, lead zinc, gold, and silver ores. On the high end were included general industrial machinery, converted paper products, tobacco manufactures, and broad woven synthetic fibers.

There is another interesting possibility with respect to the international ramifications of the corporate income tax, and this takes me into

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[1] M. Weinrobe, "Corporate Taxes and the U.S. Balance of Trade," National Tax Journal, March, 1971, pp. 79-86.

[2] J. Siegfried, "Effective Average U.S. Corporation Income Tax Rates," National Tax Journal, June, 1974, pp. 245-260.

the area of possible substantive criticism of the Harberger results. The conclusions forthcoming from Harberger's very elegant model depend too much I think upon the assumption that the burden falls upon capital owners because they have no alternative place to put their capital in the U.S. economy. But it should be obvious enough, especially at this conference, that the market for capital is international. Does the price of the capital that would have been used to build projects yielding 15 percent, 14 percent, etc., go to zero? To be sure, there is some cost involved in sending capital abroad, but despite this there are plenty of good alternative investment possibilities. So not only does the corporate tax cause problems on current account, it causes negative flows on capital account as well. It is interesting in this respect that capital inflows into Germany have been large since Germany adopted the split-rate device in 1953. While there were undoubtedly more important causes for these capital movements, this may have been a not insignificant contributing factor. We might also add to this the fact that American corporate subsidiaries have been able to defer repatriation of profits (for tax purposes) in favor of reinvestment. With the lower German rates, this adds to the incentive.

Our conclusion with respect to the U.S. corporate income tax then can only be that its overall lack of neutrality in international economic affairs is only to be the more regretted because of its quantitative importance.

Finally, a word concerning the value added tax. Europe is now using the consumption variety of the value added tax as we have heard. This is the same as a retail sales tax. Of more importance is the fact that as practiced in Europe exports are exempt and therefore the trade balance and/or strength of European currencies is enhanced. Also, I think it is

of interest that Eric Schiff in his discussion of the value added tax in Europe, states that the changeover from the old German turnover tax to the value added tax on January 1, 1968, itself had the effect of making German imports more expensive and exports less expensive, which constituted another factor perhaps in the balance of payments problems the U.S. was having at that time.[3]

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[3] E. Schiff, Value-Added Taxation in Europe, Washington, American Enterprise Institute for Public Policy Research, 1973, p. 26.